

DUL Directors Meeting
2023.08.31

Exchanging and collecting data: radio-purity assay

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COMMUNITY MATERIAL ASSAY DATABASE

A system for record-keeping

A place for sharing assay results

<http://radiopurity.org>



Community tool used by several experiments

Originally from the AARM collaboration

Nuclear Instruments and Methods in Physics Research A 839 (2016) 6–11

WISHLIST

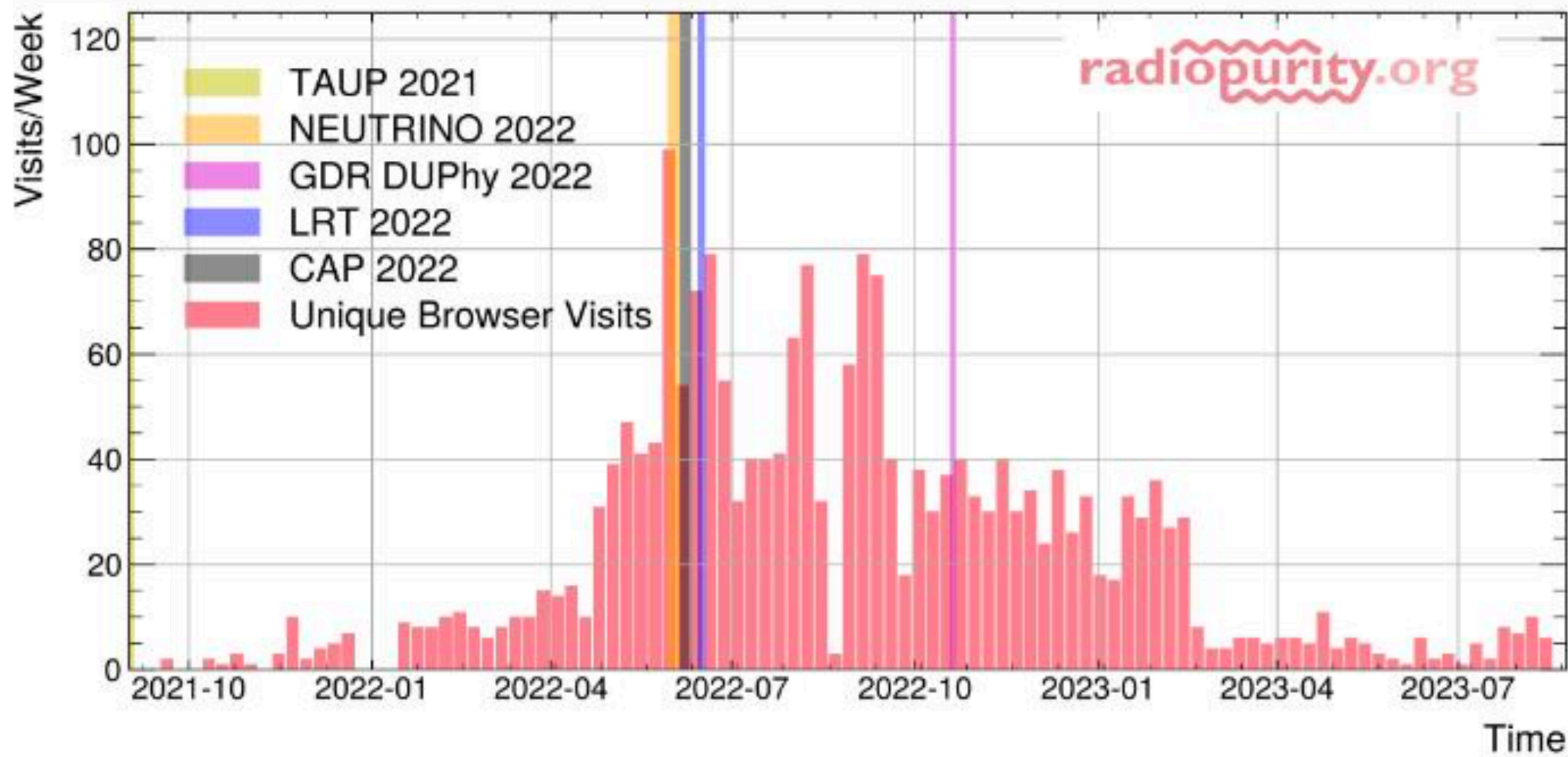
- Adding more data to the database
 - Flexible process to upload data
 - Sharing is the key
- Possibility to create a private instance for each lab running screening detectors
- Need to push forward a community effort to cross-calibrate detectors among underground labs

Open source code: <https://github.com/pnnl/Radiopurity-database-assistant>

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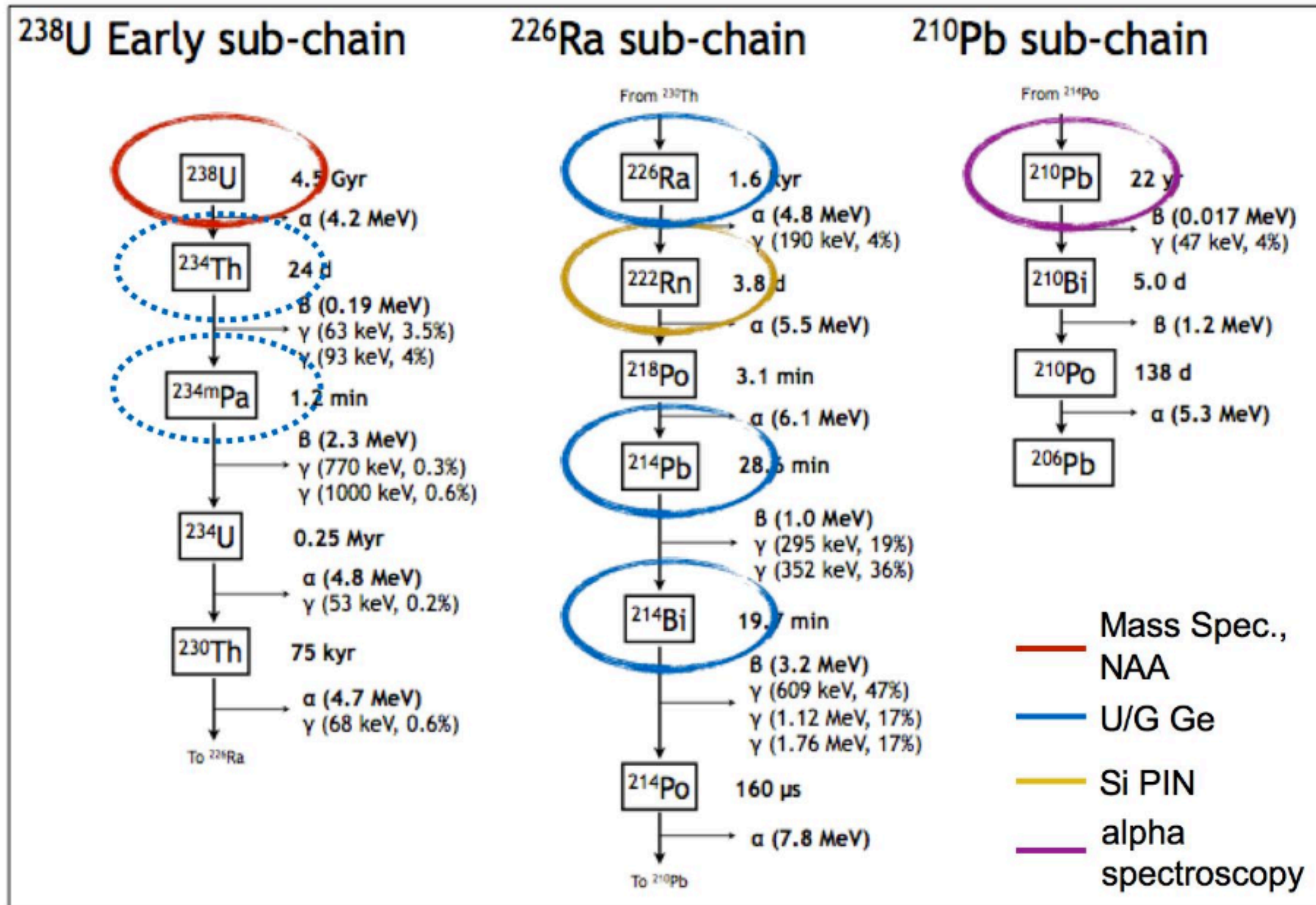
From S. Sekula talk



Details about database -
see S. Sekula talk
“Upgrading
Radiopurity.org: a
Community Material
Assay Database” on
Monday 28.08 @18:15

Open source code: <https://github.com/pnnl/Radiopurity-database-assistant>

WHAT FUTURE SCREENING IS NEEDED?



New screening techniques might be required as the current ones are already not enough in sensitivities

WHAT SPECIALTY CLEANING ?

- Surface contamination will add radioactive background to the background budget
- Some specialty cleaning might be required:
 - Ultrasonic bath
 - Etching + passivation for copper, metals
 - Electroplating
 - Leaching for plastic/glass materials
- What recipes are already in use, what labs are available to the community?



That's all Folks!